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(54) Title: **RICE AND PRODUCTS THEREOF HAVING STARCH WITH AN INCREASED PROPORTION OF AMYLOSE**

1 GCCACCGACA TCCGCGCGCA TGCTGTGTCT CACCTCCTCT TCCTCCTCCG GCGCCGCTCC
61 GCTCCTTCCC TCTCTCGCTG ATCGACCGAG CCCGGGAATC GCGGGCGGGG GTGGCAATGT
121 TCGCCTGAGC GTGGTTTCTT CGCCGCGCCG GTCTGTGGCT GGAAAGGTCA AGACCAATTT
181 CTCAGTTCTT GCGACTGCGC GAAAAACAA AACCATGGTG ACTGTGTGG AGGAGGTGCA
241 CCACCTTCC TATATATGAT TGGACCTTAA GTTGGAGGAA TTCAAGGATC ACTTCAACTA
301 TAGGATAAAA AGATACCTCG ACCAGAAATG CCTGATTGAA AAACATGAGG GGGGCTTGA
361 AGAATTTTCT AAAGGCTATT TGAAGTTTGG GATTAAATCA GTTGATGGTG CCACAATATA
421 TCGTGAATGG GCGCCTGCTG CACAAGAAGC ACAGCTCATT GGTGAGTTCA ATAAGTGAA
481 TGGTGCAAAA CACAAGATGG AGAAGGATAA ATTTGGCATT TGGTCAATCA AGATTTCACA
541 TGTCAATGGG AAGCCTGCCA TCCCTCACA TTCCAAGGTT AAATTTCTGT TTAGGCATGG
601 GGGTGGAGCA TGGGTGTGAT GTATTCCCGC ATGGATTCTG TATGCAACTT TTGATGCCCT
661 TAAATTTTGA GCTCCATATG ATGGGTACA CTGGGATCCT CCAGCCTGTG AAAGGTACGT
721 GTTTAAGCAT CCTCGACCTC CAAAACCTGA TGCTCCACGC ATCTATGAGG CTCATGTGGG
781 GATGATGGT GAAGAGCCAG AAGTAAGCAC ATACAGAGAA TTTGCAGACA ATGTGTACC
841 ACGCATACCG GCAATAACT ACAACACAGT TCAGTTAATG GCAATCATGG AACATTCCTA
901 CTATGCTTCT TTTGGGTATC ACGTGACAAA TTTTTCGCA GTGAGGAGCA GATCAGGAAC
961 ACCAGAGGAT CTGAAATATC TTGTGACAA GGCACATAGT TTAGGATTAC GAGTTCTGAT
1021 GGATGTTGTC CATAGCCATG CGAGTAATAA TGTGACCGAT GGTCTAAATG GCTATGACGT
1081 TGGACAAAAC ACTCATGAGT CTTATTTTCA TACAGGAGAT AGGGGCTACC ATAACTCTG
1141 GGATAGTCGT CTGTCAACT ATGCCAATG GAGGTCCTTA AGATTCTTC TTTCTAATTT
1201 GAGATATTGG ATGGACGAAT TCATGTTTGA TGGCTTCCGA TTTGATGGGG TTACATCAAT
1261 GCTATACCAT CACCATGGTA TCAATAAGGG ATTTACTGGA AACTACAAGG AGTATTTCAG
1321 TTTGGATACC GATGTGGATG CAATGTTTTA CATGATGCTC GCAAACCAAT TAATGCATAA
1381 ACTCTTGCCG GAAGCAACTA TTGTGTCTGA AGATGTTTCG GGCATGCCAG TGCTTTGTCTG
1441 GCCAGTTGAT GAAGGTGGAG TAGGTTTGA CTTCGCCCTG GCAATGGCCA TTCTGATAG
1501 ATGGATTGAC TACCTGAAGA ACAAAGAGGA CCGCAAATGG TCAATGAGTG AAATAGTGCA
1561 AACTTTGACT AACAGGAGAT ATACAGAAA ATGCATPGCC TATGCCGAGA GCCATGATCA
1621 GTCCATTGTT GGTGACAAGA CTATAGCAAT TCTCTTGATG GCAAGGAAA TGTACACTGG
1681 CATGTCAGAC TTGCAGCCTG CTTACCTTAC CATCAACCGT GGCATGACAC TCCAAAAGAT
1741 GATTCACCTC ATTACGATGG CCTTGGAGG TGATGGCTAC TTAAATTTTA TGGGCAATGA
1801 GTTTGGCCAT CCAGAATGGA TTGACTTTCC AAGAGAAGGC AACAACCTGA GCTATGATAA
1861 ATGCAGACGT CAGTGGAGCC TTGTGACAC TGATCACCTT CGATACAAGT ATATGAATGC
1921 ATTTGATCAA GCAATGAATG CACTCGAGGA GGAATTTTCC TTCTGTGAT CATCAAAGCA
1981 GATTGTTAGC GACATGAACG AGAAAGATAA GGTATATGTC TTTGAACGTG GAGATTGGT
2041 TTTTGTTTTC AATTTTCATC CCAACAAAAC TTACAAGGCT TACAAGTTCG GATGTGACTT
2101 GCGCGGGAAG TACAGAGTAG CTCTGAGCTC TGATGCTTGG GTCTTTGGTG GCCATGGAAG
2161 AGTTGGCCAT GATGTGGATC ACTTCAGCTC TCCCGAGGGA ATGCCAGGAG TACCAGAAAC
2221 AAATTTCAAC AACCGCCCTA ACTCATTTCA AGTCTCTTCC CCGCCCGTFA CCTGTGTGGC
2281 TTACTATCGC GTTGATGAAG ATCGTGAAGA GCTCAGGAGG GGTGGAGCAG TTGCTCTGGG
2341 AAAGATTGTT ACAGATATA TCGATGTTGA AGCAACAAGT GGGGAGACTA TCTCTGGTGG
2401 CTGGAGGGG TCCGAGAAGG ACGATGTTGG CAAGAAAGGG ATGAAGTTTG TGTTCGGTTC
2461 TTCTGACGAA GACTGCAAA GAGCATCAG ATTTCTTGAT CAGGAGCAAC TGTGTGTGCC
2521 CTGTGTAATCT GGAGATCCTG GCTTGCCTTG GACTTGGTTG TGGTTCTTTA GCAGTTGCTA
2581 TGTACCTATC TATGATATGA ACTTTATGTA TAGTTGCTCT TAAAGAAAGA ATAAGCAGTG
2641 ATGATGTGGC CTAAACCTG AGCTGCACAA GCCTAATGTA AAAATAAAGT TTCAGGCTTT
2701 CATCCAGAA AAAACAGCTG TTCAATTTACC ATCTCAAAA

(57) Abstract: Rice having reduced levels of starch branching enzymes produce grain having a high relative amylose content in the endosperm. The rice grain of this invention can be of a non-shrunken phenotype despite a lesion in the amylopectin synthesis pathway and may be transgenic or nontransgenic.



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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